

REMARKS/ARGUMENTS

The Final Office Action mailed June 21, 2005 has been carefully considered. Reconsideration in view of the following remarks is respectfully requested.

Information Disclosure Statement

Applicant hereby respectfully requests acknowledgment of reference “AA” through “AD” cited in the Information Disclosure Statement (IDS) filed on April 18, 2005 and received by the Office on April 27, 2005.

Attached herewith is a copy of the PTO Form 1449 filed on April 18, 2005 with the Examiner’s partial acknowledgment.

Please send a copy of the PTO form 1449 with the Examiner’s supplemental acknowledgement (initials).

Claim Status and Amendment to the Claims

Claims 3-6, 9-15 and 17-55 are now pending.

Claims 3, 10-11, 19, and 25-26 have been amended to further particularly point out and distinctly claim subject matter regarded as the invention. The amendment also contains minor changes of a clerical nature.

New claims 29-55 have been added, which also particularly point out and distinctly claim subject matter regarded as the invention. Support for these claims may be found, for example, in the specification, page 7, paragraph [0032], and page 13, paragraph [0047].

No “new matter” has been added by this amendment.

Amendments to the Specification

The specification has been amended to correct minor errors in the name of the elements or components such that the name of the elements or components are in conformity with the other part of the specification and drawings. The amendment is supported by, for example, FIGS. 6 and 7 and the corresponding description of the present specification. No “new matter” has been added by this amendment.

The 35 U.S.C. §112 Rejection

Claims 12-14 and 17 stand rejected under 35 U.S.C. §112, second paragraph, as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter applicant regards as the invention.

Claim 10 has been amended to provide a proper antecedent basis for “the security processor” recited in claims 12-14 and 17. With this amendment, withdrawal of the §112 rejection is respectfully requested.

The 35 U.S.C. §103 Rejection

Claims 3-6, 9, 10, 18-20, 24, 25, 27, and 28 stand rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Bromba, et al., (U.S. Pat. Publication No. 2001/0047479 A1) in view of Shen (E.P. Patent Application Publication No. 1 074 949 A1), among which claim 1 is the independent claim.

According to M.P.E.P. §2143,

To establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure.

Furthermore, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

In the Office Action, the Examiner contends that the elements of the presently claimed invention are disclosed in Bromba except that Bromba does not teach the use of an intelligent identification card. The Examiner further contends that Shen teaches the use of an intelligent identification card and that it would be obvious to one having ordinary skill in the art at the time of the invention to incorporate Shen into Bromba. The Applicants respectfully disagree for the reasons set forth below.

Claim 3 defines an intelligent identification card comprising (a) an on-board memory for storing reference data, (b) an on-board sensor for capturing live biometric data, (c) an on-board microprocessor for comparing the captured biometric data with corresponding stored reference data within a predetermined threshold and for generating a verification message only if there is a match within a predetermined threshold, and (d) an interface for communicating the verification message to an external network. The claimed verification message includes at least excerpts from the stored reference data,

and further includes at least excerpts from the captured biometric data, as recited in claim 3.

In the Final Office Action, the Examiner specifically alleges that Bromba discloses the claimed means for communicating the verification message to an external network (citing FIG. 1, connection from the processor 4 to the comparator 5 and paragraph [0028] thereof), and the claimed verification message including at least excerpts from the stored reference data and at least excerpts from the captured biometric data (citing paragraph [0026] thereof). These allegations are not correct for the following reasons.

Bromba relates to a method and apparatus for checking access authorization for a system, such as a mobile phone or banking machine. When the authorization check is positive (i.e., the attempted user is authorized), the system, for example, a mobile phone, is unlocked such that the user is able to make a phone call (paragraph [0004] of Bromba). FIG. 1 of Bromba illustrates two parts of the apparatus in the system: a first part 8 which cannot be accessed by a user (such as the SIM card in a mobile telephone or the central computer of a bank), and a second part 7 which is easier for a user to access (such as a mobile telephone itself or a computer communicating with external services over the Internet) (paragraphs [0021] and [0022] of Bromba). Thus, both of the first and second parts 8 and 7 are parts of the same apparatus or system which then communicates with an external network.

In Bromba, the processor 4 in the second part 7 may calculate a code from the modified code stored in the memory 2 and some of the detected biological features (paragraph [0025] thereof). The calculated code is transmitted from the processor 4 in the second part 7 to the comparator 5 in the first part 8 (paragraph [0026] of Bromba). However, the first and second parts 8 and 7 are within the same apparatus or system, as discussed above, and thus the calculated code of Bromba is not communicated to an external network. In addition, in Bromba, if the comparator unit 5 establishes a match between the calculated code and the access authorization code, the access authorization signal informs the system which contains the apparatus (paragraph [0028] thereof, emphasis added). Thus, although Bromba's access authorization signal is output from the apparatus, it is still internally used in the system itself. Accordingly, Bromba actually teaches away from communicating the verification message to an external network, as recited in claim 3.

Therefore, Bromba fails to teach or suggest a verification message which is communicated to an external network, as recited in claim 3.

Furthermore, in Bromba, the comparator 5 compares the calculated code with the access authorization code (such as a PIN) stored in the memory 6, and if they matches, the comparator 5 outputs an access authorization signal (the alleged verification message). Therefore, in Bromba, the detected biological feature (the alleged capture data) is first transformed into calculated code by the processor 4, and then compared by the comparator 5. The result of a comparison is either "mach" or "mismatch", and thus

any detected biological feature is completely lost through such code calculation and comparison processes. There is no suggestion in Bromba that that the comparator 5 receives any signal other than the calculate code or performs functions other than comparison and outputting an resulting signal. Thus, Bromba's access authorization signal does not include any excerpts from the stored reference data or that from the captures biometric.

Accordingly, Bromba fails to disclose or teach the claimed verification message which includes at least excerpts from the stored reference data, and at least excerpts from the captured biometric data, as recited in claim 3.

Shen, the secondary reference, only teaches transmitting a segment of the fingerprint reference data stored in the memory device 11 to the host monitor/computer 3, failing to teach or suggest transmitting captured fingerprint data detected by the fingerprint sensor 12.

Accordingly, Bromba, whether considered alone or combined with or modified by Shen, does not teach or suggest communicating the verification message to an external network, where the verification message includes at least excerpts from the stored reference data, and includes at least excerpts from the captured biometric data, as recited in claim 3.

Accordingly, it is respectfully requested that the rejection of claims based on Bromba and Shen be withdrawn. In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

Dependent Claims

Claims 4-6, 9-15 and 17-28 depend from claim 3 and thus include the limitations of claim 1. The argument set forth above is equally applicable here. The base claims being allowable, the dependent claims must also be allowable at least for the same reasons.

In addition, contrary to the Examiner's allegation, the alleged combination of Bromba and Shen further fail to teach or suggest the distinctive features recited in the dependent claims as follows:

Paragraph [0028] of Bromba does not teach or suggest any remote authentication system for additional verification (claim 4), or remotely storing reference data that is different from the locally stored reference data (claim 5), as discussed above.

Paragraph [0025] of Bromba only describes the use of a single matching algorithm, and fails to teach or suggest using a different matching algorithm in on-board matching than that used at the remote authentication system (claim 6), or any hybrid algorithm (claim 20).

The display unit 17 of Shen (column 4, lines 18-23 thereof) merely displays the card information that exchanged with the host computer, which is only exchanged upon verifying that the card holder is the assigned user (see column 3, lines 16-21 thereof, emphasis added). Thus, such information cannot be used for real-time feedback while the user is manipulating the finger over the fingerprint sensor, as recited in claim 19.

In addition, column 1, lines 6-14 of Shen merely suggests that misplaced or stolen cards may leads to unauthorized use of such cards, not restricting use of the card to a predetermined location (claim 24).

Applicants respectfully assert that these features themselves are distinctive and patentable over the prior art, and thus the new independent clams reciting these features are also patentable.

In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

Conclusion

It is believed that this Amendment places the above-identified patent application into condition for allowance. Early favorable consideration of this Amendment is earnestly solicited.

Request for Interview

Applicants respectfully request an interview to expedite the prosecution of this application. Submitted herewith is an Applicant Initiated Interview Request Form. The Examiner is invited to call the undersigned attorney at the number indicated below to schedule a telephonic interview to discuss the matter.

The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 50-1698.

Respectfully submitted,
THELEN REID & PRIEST, LLP

Dated: December 20, 2005



Masako Ando
Ltd. Rec. No. L0016

Thelen Reid & Priest LLP
P.O. Box 640640
San Jose, CA 95164-0640
Tel. (408) 292-5800
Fax. (408) 287-8040